

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/723,019	11/27/2000	Elwyn B. Davies	476-2041	5640
7590 06/01/2005		EXAMINER		
William M. Lee, Jr.			MEHRA, INDER P	
Lee, Mann, Smi	th, McWilliams, Sweeney	/ & Ohlson		
PO Box 2786			ART UNIT	PAPER NUMBER
Chicago, IL 60690-2786			2666	

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	•	Application No.	Applicant(s)			
		09/723,019	DAVIES ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Inder P. Mehra	2666			
Period fo	The MAILING DATE of this communication a or Reply	ppears on the cover sheet with the	correspondence address			
THE - Exte after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. It is period for reply specified above is less than thirty (30) days, a report of the period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to reply within the set or extended period for reply will, by statute to	J.  1.136(a). In no event, however, may a reply be ti  eply within the statutory minimum of thirty (30) da  by will apply and will expire SIX (6) MONTHS fron  ute, cause the application to become ABANDONE	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1) 又	Responsive to communication(s) filed on 20	December 2004				
·		nis action is non-final.				
3)□	,—					
Disposit	ion of Claims					
5)□ 6)⊠ 7)□	4) ☐ Claim(s) 1-23 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-23 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.					
Applicati	ion Papers					
10)⊠	The specification is objected to by the Examination The drawing(s) filed on <u>27 November 2000</u> is Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct the oath or declaration is objected to by the 1	s/are: a)⊠ accepted or b)⊡ object ne drawing(s) be held in abeyance. Se ection is required if the drawing(s) is ob	ee 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).			
Priority u	ınder 35 U.S.C. § 119					
12) a)[	Acknowledgment is made of a claim for foreign All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure see the attached detailed Office action for a list	nts have been received.  nts have been received in Applicat  iority documents have been receiv  au (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachmen	t(s)					
1) Notic	e of References Cited (PTO-892)	4) Interview Summary	/ (PTO-413)			
3) 🔲 Inform	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 r No(s)/Mail Date	Paper No(s)/Mail D				

#### **DETAILED ACTION**

1. This is in response to application dated: 12/20/04.

# Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1-4, 6, 11-14, and 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - a. Claims 1, 6, 11, and 16-18, recite the limitation "capable of communicating" in line 2 or 3. This term is not positively recited claimed limitation. Therefore, the limitations after the term "capable" are not considered as claimed limitations. It is suggested the applicant remove the word "capable" from the claims.
- b. Claims 2-4 recite the limitation "a system" in line 1. There is insufficient antecedent basis for this limitation in the claim. This should be changed to "the system".

Claims 12-14 recite the limitation "a method" in line 1. There is insufficient antecedent basis for this limitation in the claim. This should be changed to "the method".

Applicant argues that "However, no amendments are made to the remaining claims.

Insufficient antecedent basis occurs where there is no earlier reference to a feature later referred to in a claim. Typically this occurs when the definite article "the" or "said" is used to qualify a feature which is introduced for the first time. The Examiner will see that claims 2 to 4 ("A

system as claimed in claim 1") and 12-14 ("A method as claimed in claim 11") use the indefinite article .'a" and therefore, do not require antecedent basis.

In response it is stated that where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "a system as claimed in claim 1" in claims 2-4 and "a method as claimed in claim11" are used by the claim to mean "any system similar to claim1" or any method similar to claim11 respectively, while the accepted meaning is "the system as used in claim 1" and "the method as used in claim11". There is, therefore, definite link and antecedent basis of system in claim1 and claim 11 respectively.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-4, 6-9, 11-14, 16-18 and 22, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mikkonen et al** (US Patent No. 6,501,741), hereinafter, '741, in view of **Das** et al (US patent No. 6,742,036), hereinafter '036.

For claims 1, 6, 11, 16-18 and 22, Mikkonen '741 discloses "a communications system

comprising a first node (Internet host, col. 3 lines 35-60)----communicating with sender host (Internet host, col. 3 lines 35-60) via communication network (col. 3 lines 30-40)----communication protocol (IPv6, col. 3 lines 5-10, and col. 5 lines 60-65)----dynamic address variation facility (dynamic address col. 3 lines 55-60) for managing mobility (col. 6 lines 22-24) of the first node ------the communication protocol (IPv6, col. 3 lines 5-10, and col. 5 lines 60-65, col. 3 lines 35-40, col. 5 lines 64-66, col. 10 lines 15-20)-----to support use of the use of second address to identify the first node instead of the first address in response to the non-mobility related requirement to use the second address to identify the first node for communication a packet between the first node and the second node (refer to col. 3 line 65-col. 4 line 2).

Mikkonen '741 does not disclose explicitly the following limitations, which are disclosed by Das's '036, as follows:

• "to support use of second address to identify the first node instead of the first address in response to the non-mobility related requirement to use the second address to identify the first node" (if confirmation fails to occur----the server agent releases an address from existing pool -----for dynamic addressing-----IP address matching, refer to col. 3 lines 29-40).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of, "to support use of second address to identify the first node instead of the first address". This capability can be implemented by combining the system as taught by Das's '036. The suggestion/motivation to do so would have been to provide quality of service in wireless network and thus support mobility.

For claims 2-4, 7-9, and 12-14, Mikkonen '741 discloses all the limitations of subject matter with the exception of the following limitations, which are disclosed by Das's '036:

- "use the second address to identify the first node ---requirement to use the second address---- the first node", as recited by claims 2, 7 and 12, (if confirmation fails to occur----the server agent releases an address from existing pool ----for dynamic addressing----IP address matching, refer to col. 3 lines 29-40).
- "use the second address to communicate a packet between the first node --requirement to use the second address---- the first node", as recited by claims 3, 8
  and 13, (if confirmation fails to occur----the server agent releases an address from existing pool -----for dynamic addressing----IP address matching, refer to col. 3 lines 29-40).
- "use the second address to communicate a packet between the first node --requirement to route the packet originating from the second node to a third node", as
  recited by claims 4, 9 and 14, (if confirmation fails to occur----the server agent
  releases an address from existing pool -----for dynamic addressing-----IP address
  matching, refer to col. 3 lines 29-40).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of, "to support use of second address to identify the first node instead of the first address". This capability can be implemented by combining the system as taught by Das's '036. The suggestion/motivation to do so would have been to provide quality of service in wireless network and thus support mobility.

6. Claims 5, 10, 15, 19-21, and 23, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mikkonen et al** (US Patent No. 6,501,741), hereinafter, '741, in view of **Das et al** (US patent No. 6,742,036), hereinafter '036, further in view of **Lemilainen et al** (US Patent No. 6,681,259), hereinafter Lemilainen.

For claims 5, 10, 15, 19-21, and 23, Mikkonen '0741 discloses "a communications system comprising a first node (Internet host, col. 3 lines 35-60) associating with routing packets (abstract, col. 8 lines 15-20) from a second node to the first node via a first access network of a first network of a first type (radio interface, fig. 5) and a second address associated with routing packets from the second node to the first node via a second access network of a second type (GSM or digital cellular network, in fig. 5); the first and second types are different and interconnected by the intermediary network (SGSN, in fig. 5) being arranged to operate in accordance with a communications protocol ((IPv6, col. 3 lines 5-10, and col. 5 lines 60-65) having a dynamic address variation facility (dynamic address col. 3 lines 55-60) for managing mobility (col. 6 lines 22-24) of the first node -----the communication protocol (IPv6, col. 3 lines 5-10, and col. 5 lines 60-65, col. 3 lines 35-40, col. 5 lines 64-66, col. 10 lines 15-20)----to support use of the second address -----to identify the first node -----in response to the nonmobility related requirement to use the second address to identify the first node for communication a packet between the first node and the second node (refer to col. 3 line 65-col. 4 line 2).

Mikkonen '741 does not disclose explicitly the following limitations, which are disclosed by Das's '036 and also by Lemilainen's '259, as follows:

- Das's '036 discloses "to support use of second address to identify the first node
  instead of the first address in response to the non-mobility related requirement to use
  the second address to identify the first node" (if confirmation fails to occur----the
  server agent releases an address from existing pool ----for dynamic addressing----IP
  address matching, refer to col. 3 lines 29-40).
- Lamilainen discloses "to support use of second address to identify the first node instead of the first address in response to the non-mobility related requirement to use the second address to identify the first node" (a terminal A according to the invention can be connected for example to a wireless local area network WLAN or to a GSM mobile communication network MNW", refer to col. 9 lines 15-32;
- Lamilainen discloses "first access network of first type ----second access network of second type; and the first and second types are different" (furthermore, in a terminal A there are several network interface adapters NIC1, NIC2, NIC3 available for coupling to data transmission networks of different types, refer to col. 4 lines 20-25), and are connected by intermediary network" (connected by Internet NW1, fig. 6, refer to col. 9 lines 20-30.).
- \* Lamilainen discloses "computer executable software code stored on a computer readable medium, as recited by claims 19, -21 and 23, refer to col. 4 lines 20-25 and fig. 2.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the capability of, "to support use of second address to identify the first node

instead of the first address". This capability can be implemented by combining the system as

taught by Das's '036. The suggestion/motivation to do so would have been to provide quality of

service in wireless network and thus support mobility.

Response to Arguments

7. Applicant's arguments filed 12/20/2004 have been fully considered but they are not

persuasive.

a. Applicant argues, "unlike IPv6 and Mobile IP (MIP) which are protocols which

provide a dynamic address variation facility for managing mobility, DHCP as disclosed

in Mikkonen does not have such a facility and this would be recognized by one skilled in

the ad. DHCP is a protocol for assigning an IP address to a host on a network when that

host starts up. It has absolutely no mechanism for handling mobility of hosts. DHCP

merely enables host IP addresses to be assigned within a domain by a central mechanism

rather than through static configuration of each host. Accordingly, one skilled in the art

would appreciate that Mikkonen does not disclose a dynamic address variation facility for

managing mobility.

In response, it is stated that DHCP also permits completely dynamic

configuration, in which server loans an address for a limited time. However, IPv6 and

Mobile IP (MIP) which are protocols which provide a dynamic address variation facility

for managing mobility is disclosed by Mikkonen, where Mikkonen discloses explicitly,

"Mobility is achieved in Internet protocol version 6 by supplementing the protocol with a

data transmission method whereby the domains can transmit information from a wireless

Internet host that has changed its domain. This data transmission method is called in this specification a home agent. In this context, reference is made to the Internet protocol standard version 6 <u>IPv6</u>, where operation of this home agent is described in more detail", refer to col. 9 lines 6-12...

Applicant argues, "Applicants cannot understand that this passage discloses the existence of first and second addresses nor that it discloses the use of a second address instead of a first address in response to a non-mobility related requirement. Applicants believe that there is no disclosure of these features in Das".

In response, it is stated that Das discloses, "In a first step, the UAS/PN checks at the SA whether the subscriber exists (and possibly also has a corresponding password), (FIRST ADDRESS) and ---. This must be confirmed by the SA. If not, the subscriber does not receive an access authorization. In a second step, the UAS/PN requests an IP address (SECOND ADDRESS) for the terminal of the subscriber. ------

Upon receiving said request, the server agent releases an address from an existing address pool and transfers it to the UAS/PN. This address pool includes either existing IP addresses (First address) for real computers in the HN or a virtually existing address space for dynamic addressing (Second address).

b. Further, Applicant argues that "applicants deny that there, would be any suggestion or motivation to combine teachings from Mikkonen and Das as argued by the

Examiner. The . Examiner is clearly indulging in impermissible hindsight by picking and mixing alleged features from totally unrelated items of the prior art.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning.

But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

c. For claims 2-4 and 12-14, see office action paragraph 3 above, applicant argues that "However, no amendments are made to the remaining claims. Insufficient antecedent basis occurs where there is no earlier reference to a feature later referred to in a claim. Typically this occurs when the definite article "the" or "said" is used to qualify a feature which is introduced for the first time. The Examiner will see that claims 2 to 4 ("A system as claimed in claim 1") and 12-14 ("A method as claimed in claim 11") use the indefinite article .'a" and therefore, do not require antecedent basis.

In response it is stated that where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed.

Cir. 1999). The term "a system as claimed in claim 1" in claims 2-4 and "a method as claimed in claim11" are used by the claim to mean "any system similar to claim1" or any method similar to claim 11 respectively, while the accepted meaning is "the system as used in claim 1" and "the method as used in claim11". There is, therefore, definite link and antecedent basis of system in claim1 and claim 11 respectively.

# In light of above explanation, applicant's arguments are not persuasive.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### Conclusion

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao, can be reached on 572-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/723,019

Art Unit: 2666

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Inder P Mehra

Page 12

Examiner
Art Unit 2666

pang ton Primary examilia